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Interwoven Leadership: the Missing Link in Multi-Agency Major Incident Response

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This paper reports on research into the effectiveness of strategic commanders and their multi-agency teams in response to major incidents. It is argued that current models of crisis leadership fail to establish a balance between the requirement for task skills, interpersonal skills, stakeholder awareness and personal qualities of commanders and their teams. The paper sets out a theoretical model for interwoven leadership combining these features.

1. Introduction

The crisis management literature, typically, focuses on a taxonomy, definitions, communications and analyses of crises. In contrast, there are far fewer contributions to this debate from scholars researching incident command and leadership, despite this being identified as one of the most critical factors affecting crisis response (Flin & Arbuthnot, 2002).

A number of contextual factors may contribute to this research deficit. These include inconsistent definitions of the key components of effective crisis team leadership; the huge spectrum of stakeholders involved in a crisis, each of which may focus on different aspects of effectiveness according to their own agendas; the variable nature of crises; the many factors that can affect crisis leadership for good or ill; the interaction between leaders and teams who may not work together regularly; the varying effect of stress and stressors on leaders; and the effect of organizational culture on leaders and their decision making. The changing contexts and causes of crises make it very difficult to elicit a consistent theory of effective leadership (Mitroff, Pearson, & Harrington, 1996; Pearson & Clair, 1998).

The diversity of competing challenges is significant, as leaders must balance public safety and showing

compassion to those caught up in the crisis with other concerns. These concerns include freedom of movement, and over commitment of resources and prioritization under the glare of media scrutiny and political pressure from all sides (Boin & 't Hart, 2003; Boin, 2005; Drennan & McConnell, 2007). The concepts of 'leadership' and 'leadership skills' are not well defined (Slaven & Flin, 1997); therefore, identifying what makes for effective crisis leadership is somewhat problematic. There is also a wide spectrum of effectiveness criteria frequently applied by stakeholders in a crisis (Pearson & Clair, 1998) even though it is acknowledged by scholars that each crisis is potentially unique (Turner, 1978; Yusko & Goldstein, 1997; Sniezek, Wilkins, Wadlington, & Baumann, 2002; Schoenberg, 2005). There is a lack of research both into the relationship between incident/emergency command abilities and personality (Flin & Slaven, 1996) and into the selection and training of crisis team leaders (Borodzicz, 2004). In the United Kingdom emergency services, competence requirements for key decision makers are still likely to be based on rank rather than proven skill, expertise and ability (LaPorte & Consolini, 1991; Pearce & Fortune, 1995; Borodzicz, 2004). However, it is argued that personal characteristics may also contribute to the effectiveness of a leader, whether at normality or during the height of

an incident. These include self-awareness, emotional stability, self-confidence and even the willingness to take on a leadership role at all (Flin, 1996). There is also a 'locus of control' factor (the extent to which an individual perceives that they have control over a given situation), and a capacity to discuss and question aspects of crisis openly and without defensiveness (Travers, 1998).

Effectiveness must also be examined in the context of the various stages of a crisis, and it depends pivotally on the effectiveness of the person leading that crisis (Yusko & Goldstein, 1997). Crisis management teams and leaders need to be selected to cope with the demands of tasks within crises (Smith, 2000), but leading in a crisis also entails addressing people, task and environment issues (Boin & Lagadec, 2000). Crisis leadership must be effective amid organizational chaos, pressure from the media, stress, inaccurate information (Boin & 't Hart, 2003) and the diverse demands from stakeholders. The human consequences of ineffective command in an emergency can range from minor injury to significant loss of life (Slaven & Flin, 1997; Flin & Arbuthnot, 2002) as well as damage to property, economic and social implications. It is, therefore, important to understand that the handling of the incident will play out at a political level (Boin & 't Hart, 2003; Boin, 2005) where crisis can be seen as publicly visible failure (Borins, 2002). It can be seen that operational handling of the physical incident itself is not the only yardstick of effective leadership.

Although the outcomes of an effective team generally exceed the sum of the isolated individual contributions of its members, (Pearson & Clair, 1998), many team characteristics will be affected, positively or negatively, by the leader's attitudes, behaviours and competencies (Crichton, Lauche, & Flin, 2005). The team members' agendas must also be considered (Bland, 1998), particularly to encourage the cohesiveness so important in the team (Smith, 2000). Hence, it is important to understand that both the team members and the leader are in a dynamic state of mutual construction that contributes significantly to a positive outcome.

Any multi-agency event will be demanding, and effectiveness will typically rely on successful integration of the team members (Auf Der Heide, 1989; 't Hart & Rosenthal et al., 1993; Paton & Flin, 1999) requiring, *inter alia*, strong leadership and team optimization skills. However, power, authority and responsibility rarely accrue to one person, and the support of others would be needed even if the decision maker could make a choice unilaterally (Taylor, 1984; Pearson & Clair, 1998; Borodzicz & Van Haperen, 2002; Flin, 1996; Smith, 2000). By definition, no leader operates without a team for him or her to lead, and trust is a key factor (Burke, 1997).

Culture impacts on crises at all stages, from planning for them (Penrose, 1999; King, 2002) through managing

them, and thence returning to normality. Approaches in crisis handling are likely to differ between the action-oriented blue light services and consensus-seeking public services such as local government and health services, and this may cause tension. There can be reinforced silos of hierarchy and structure that not only hinder communication intra- and inter-organizationally, but constrict interdisciplinary thinking, sharing and trans-departmental thinking (Carrel, 2000). The willingness of civil servants to experiment with new ideas and policies may be constrained by their organizational context and culture, with the potential to lead to groupthink ('t Hart, 1994).

The hierarchy of an organization can influence the degree of autonomy that any incident manager has (Penrose, 1999), the level of their authority and responsibility (Flin, 1996; Boin & 't Hart, 2003) and their confidence and ability to step outside standard operating procedures (Borodzicz, 2000) as following these blindly may be counter-productive (Turner, 1978; Turner, 1994; Skriver, Flin, & Robert Gordon, 1996; Lagadec, 1997; Borodzicz, 2000; Borodzicz, 2004; Crichton et al., 2005). If leaders are constrained by fears of breaching organizational taboos – cross-functional, technical, hierarchical or cultural – for fear of future sanctions, their effectiveness and usefulness to the crisis management team and the organization may be compromised (Robert & Lajtha, 2002). In organizations with a perceived blame culture, risk aversion is likely to be high and there is a tendency to counter this by becoming extra conservative in responding to the crisis – this has been called 'threat rigidity' (Weisaeth, Knudsen, & Tonnessen, 2002; Grant & Mack, 2004; James & Wooten, 2005). Conservatism could be countered by the concept of a 'court fool' or a devil's advocate to set out opposing views (Carrel, 2000), although this would require champions at a very senior level in an organization to embed and encourage divergent opinions, especially within the risk-averse public services.

It is less easy in the field of crisis response leadership to identify those who break the rules and win over difficult odds to achieve their desired outcome, as there tends to be more focus on command failure. It is the failures that are most under scrutiny in the event of a subsequent enquiry (Flin, 1996). However, where a crisis event has been successfully managed, often this can be directly linked to creative or flexible rule-breaking (Borodzicz, 2004).

2. Emergency management in the United Kingdom

The emergency management system in the United Kingdom is historically predicated on a local response,

mirroring the reluctance of the central government to interfere in matters of a local nature. This autonomy is reinforced by the existence of an elected local government, although there is also a wide gamut of non-elected organizations to facilitate planning coherence and response to major incidents.

The Civil Contingencies Act 2004 divides responders into two main categories. Category 1 responders have a legal obligation to prepare plans for addressing risk and dealing with a wide range of civil emergencies. The police service, fire and rescue authorities, NHS ambulance trusts, Primary Care Trusts, local government, the Environment Agency and the Health Protection Agency come under this category. Category 2 responders are required to cooperate with and provide information to Category 1 responders, and include electricity and gas suppliers, water and sewerage suppliers and telecommunication providers (HMSO, 2004).

The wide cross section of cultural approaches to situation analysis and decision making is evident. 'In most large scale crisis situations, there may be some centralisation via crisis centres, but the majority of important decisions result from the process of bringing together many key participants in which consultation, negotiation and outright confrontation are the orders of the day' (t Hart & Rosenthal et al., 1993).

Invocation of the emergency structure will trigger one or more of three ascending levels of response and recovery, known as Bronze, Silver and Gold, which respond at the operational, tactical and strategic levels. At the strategic level, the multi-agency group that brings together the gold commanders from the relevant organizations is known as the Strategic Co-ordinating Group (SCG), usually chaired by a senior police officer of Assistant Chief Constable rank or above. He or she is referred to as the Gold Co-ordinator, to reinforce the co-ordination role as opposed to a command and control approach. The SCG will be situated away from the main incident, and will take a longer term, high-level holistic view of response and recovery, horizon scanning for developments and anticipating demand on resources and manpower and highlighting its strategy to the Silver level below it for implementation.

3. Research approach

This paper puts forward initial findings from continuing research conducted on effective multi-agency leadership at the strategic level in response to major incidents in the United Kingdom. The words 'Gold' and 'Strategic' will be used interchangeably to refer to the level of emergency response being studied.

Unstructured interviews based on guided conversations (Yin, 2003) were undertaken with senior officers and officials in key agencies who contribute at a

strategic level in a crisis, both as leaders of, and participants in, strategic-level teams. Their perspective on what constitutes effectiveness in a strategic multi-agency crisis leader was based on their personal experience. Respondents identified positive or negative factors impacting on effectiveness as well as how they viewed the roles of other participating agencies in the strategic team, and what training should be undertaken.

This approach was chosen because of the difficulties in conducting research in this area. Naturalistic research – that is, rooted in the natural setting of what is being described (McNeill, 1990) – on crisis is problematic, due to the context and ethical issues surrounding the way crises take place. Experimenting on live subjects is not an option for obvious ethical reasons, not only because of the potential huge cost of such an approach, but even more crucially, because of the impact on human lives (Robert & Lajtha, 2002). True crises are still relatively rare, and cannot be reproduced because each one is unique, and thus cannot be replicated in an experiment. Using a methodology such as the critical incident technique (Flanagan, 1954) – where an individual is debriefed after the occurrence of the crisis in order to discover behaviours around critical elements of the job – can be flawed with the wisdom of hindsight. Data analysis of archive material will also depend on the perspective of the person(s) collecting it. Post-incident analysis is invariably conducted through the lens of criticism and 'lessons learnt'.

Equally, a simulated crisis cannot be tested in reality (Robert & Lajtha, 2002). Thus, researchers are reduced to using simulations to gain their insights, as this method is often the only feasible way to analyse a person's ability in a crisis situation (Kleiboer, 1997). However, simulations too have their drawbacks, where performance may be linked with conformance, and may be more concerned with a player's ability to conform to a particular training culture than about dealing with a real crisis (Borodzicz, 2004).

4. Preliminary findings compared with current literature

The factors associated with effective leadership are already well researched in the academic literature. A few examples from the many available take account of managerial effectiveness including personality traits, skills, knowledge and self-image (Boyatzis, 1982); understanding the self, including goals, intentions, responses and behaviour, as well as understanding others and their feelings (Goleman, 1996); understanding complex interdependencies and the implications of efforts to make changes require cognitive skills and systems thinking

(Senge, 1990); and values and evidence-based leadership (Kouzes & Posner, 2007).

There are several elements that could potentially have a significant bearing on crisis leader effectiveness. Experience, skills, behaviours, commitment, training, and values of the Gold Co-ordinator and their team are key factors. However, the diverse cultures and decision-making approaches that are likely to exist in the Gold team, the frequency with which this team meets to practice its response skills and the presence or absence of team member continuity must colour effectiveness. The wide variety of stakeholder expectations arising from a spectrum of major incidents also has a bearing.

It has been argued that the test of a good crisis leader is his or her ability to focus on solvable problems; to prioritize the elements of a problem in terms of how much progress can be achieved with each element in a very small amount of time; to delegate responsibility effectively; to manage the 'span of control', or number of pressing tasks; to communicate clearly and rationally; and to keep a level head in a crisis (Alexander, 2004). However, this approach appears to focus more on

analytical and logical competences than on people skills. Command skills identified from military and emergency services (Slaven & Flin, 1997; Crichton et al., 2005) would also suggest situation assessment, generic decision-making, prioritizing, monitoring and planning.

Researchers have also recognized the significance of human management competences such as team co-ordination, leadership and stress management. It is no longer just about handling the technical side of a crisis, but also recognizing important qualitative contributions (Boin & Lagadec, 2000; Borodzicz & Van Haperen, 2002). As in other areas of leadership, there is an increasing appreciation that people management competences are as essential as task competencies, and that both competency sets need to be included in assessing, training and evaluating effective crisis managers. Non-technical skills are as important as technical expertise and knowledge and application of emergency operating procedures (Crichton & Flin, 2001). Crichton et al. (2005) put forward a helpful list of command behaviours highlighting both people and task aspects for strategic- and tactical-level incident management team members.

Category	Element	Behaviours
Situation assessment	Information gathering	Obtain summary of current situation from others
	Shared awareness	Shares view of current situation with others
	Projection/prediction	Discusses contingencies and identifies potential future problems
	Expectations	Articulates expectations i.e. goals and potential event evolution
Decision-making	Problem definition and diagnosis	Gathers information and diagnoses problem
	Option generation	Recalls previous similar experiences; considers alternative courses of action
	Risk and time assessment	Identifies the risks and discusses alternative courses of action: considers time available in which to select course of action
	Response selection (analytical/rule-based strategy use)	Identifies options and selects courses of action
	Outcome review	Checks outcome against expectations
Teamwork	Team and workload management	Distributes tasks appropriately among team members and detects gaps and inconsistencies
	Coordination of activities	Ensures that all team members are engaged in the task and are participating to achieve the goal
	Consideration and support	Acknowledges other team members tasks
Leadership	Command	Takes charge of situation if required, identifies in tensions and goals; establishes and implements incident management team structure (if required)
	Planning and replanning	Participates in planning and encourages task completion; modifies plans if required in response to situation
	Provide direction	Determines key goals and prioritise these tasks and activities
	Delegation	Checks the tasks are being appropriately undertaken
	Communication	Briefing/debriefing
	Communication with others	Conducts briefings/debriefing to share information Uses clear and open communication with others

From Crichton et al. (2005).

Although these command skills might be acknowledged by the vast majority of Gold leaders, it is suggested that there are some significant omissions. There is no mention of personal resilience to stress, or of an ethical dimension, or of the moral courage required to make a difficult command decision. It takes no account of the cultural and political dimension in which a crisis leader may have to operate. One senior police officer who took part in the research interviews gave an example of the need to adapt to community sensibilities after the co-ordinated bomb blasts that were perpetrated by Islamic extremists in London in July 2005. The UK Police Service put out messages of reassurance that there were armed officers on the streets for people's protection. This had a negative impact on the Muslim community who saw this as threatening. The Police Service learned about this perception from their Independent Advisory Committees, which included representatives from the Muslim community. When the next threat took place, the Police revised their messages to reinforce that their officers were on the street to protect all the communities, and would give support to those communities wherever they could. For a military example, one need only look to some of the delicate negotiations that take place between the British Army and local tribes-people in Afghanistan, often in the middle of challenging incident handling.

Crisis leaders need to be able to put themselves in the position of all stakeholders, including the victims, and be able to recognize their diverse needs and feelings. They need to anticipate and manage the stress experienced by others, while also dealing with the stress they themselves are experiencing (Travers, 1998). A leader under severe stress will neither be able to make the effective analysis and decisions required, nor be in a position to support others, if he or she has not attended to their own psychological welfare.

Leaders managing crises under stressful situations are likely to revert to the style with which they are most comfortable – an unconscious preference perhaps – and the more disturbing the situation, the stronger the urge to take refuge in familiar procedures (Lagadec, 1997). Thus, those incident managers and commanders who place more value on their people management skills may well focus their attention on their team, stakeholders and operational partners. Those who value their logical and analytical skills may pay more attention to problem analysis, prioritized decision-making and solution delivery. 'Leaders who are more task-oriented than human-relations oriented reach the point where they neglect human relations altogether (and vice versa)' (Lagadec, 1993). It is clear that it is the successful combination of the two stances that is likely to deliver the most effective outcome, but it is worth

noting that personal preferences and organizational culture will play a large part. Other personal characteristics will also contribute to the makeup of a leader, whether at normality or during the height of an incident, such as self-awareness, emotional stability, self-confidence and the willingness to take on a leadership role at all (Flin, 1996).

At all levels of crisis handling, and particularly where the crisis is hallmarked by inter-agency response, relationships with stakeholders and operational partners have to be given careful consideration, not just in the planning stages, but during the incident and after in the recovery stage.

Although there are many common components that consistently emerge and that may be applicable to crisis response leaders, there are some difficulties in transferring leadership qualities, abilities and competences in wholesale fashion. The person who was impressive in one crisis may collapse in another (Wolfe, 1991; Lagadec, 1993; Flin, 1996) and effective crisis management behaviours will vary from incident to incident (Yusko & Goldstein, 1997). A crisis will be managed differently because of the many situational factors that pertain, including the context of the event (e.g., business or industrial incidents, terrorist attacks, major fires, epidemics); the type of industry (oil, aviation, pharmaceutical, government organizations); and organizational culture and structure. In events involving government/public organizations, the majority of important decisions result from bringing together key actors. In such multi-agency environments, there can be tensions between the various operating partners arising from different desired outcomes and objectives, as well as differing cultural and organizational imperatives.

As part of the research conducted into what constituted effective crisis leadership, discussion in the interviews highlighted the importance of leadership attributes in dealing with the plethora of demands on a crisis leader's abilities. These attributes were compared and contrasted in the context of both exercises as well as real incidents. The interviewees consisted of Gold co-ordinators as well as those who have participated as members of a Gold team in order to capture different perspectives of effective crisis leadership.

Patterns of response were found indicating four key areas important to leader effectiveness – Task Skills, Interpersonal Skills, Personal Attributes and Stakeholder Savvy (utilizing the acronym TIPS) – integrated with professional and technical expertise, training and exposure to incidents. The TIPS model (Figure 1) aims to take account of the different demands on crisis leaders and proposes an interwoven approach to meeting those difficulties. This is in contrast to research on leadership in normality. More research has been conducted on leader activities and behaviour than on any



Figure 1. Interwoven leadership (TIPS) model.

other aspect of leadership but ‘the proliferation of taxonomies and lack of agreement about what behaviors to study has made it more difficult to integrate the research on leader behaviour’ (Yukl, 2006, p. 93). Thus, the study of leadership seems to have had rather a narrow focus as opposed to an integrative one.

It is argued that the extra layers of complexity that are apparent in the multi-agency response to a major incident need an integrative leadership approach.

Each area contains pertinent skills, behaviours and/or attributes that facilitate and influence effectiveness, which are defined in order to maintain consistency of understanding. These behavioural definitions make it easier to identify the presence or absence of the skills and attributes for the purpose of training and assessment.

The categorization of the groups of skills, behaviours and attributes under the four headings could be varied – for example, ‘accepting new reality quickly’ is placed under Task Skills, but an alternate view fed back to the authors was that it could also be placed under Personal

Attributes, as it could be affected by the individual, their background and their own self-belief. This respondent – an emergency planning officer in a large UK Constabulary – commented that it was not unknown for people to persist with a course of action even when faced with clear evidence to the contrary. Much of the literature on risk perception appears to suggest that risk and irrationality are not strangers to each other (Royal Society, 1992). He also thought that pragmatism (with a behavioural definition referring to a focus on practical and workable actions and outcomes) was more relevant in Task Skills than in Personal Attributes; his view was that focusing on workable solutions was directly connected to other elements in the section on Task Skills.

This highlights the point that although the model identifies four areas of focus, they should not be seen as discrete, but interwoven like a rope, each strand essential to the whole. For example, decision making – one of the most critical of the effectiveness criteria – could be seen as a task that overlaps interpersonal skills

and stakeholder savvy, because decisions are not taken independently but jointly. Willingness to take a decision, as opposed to the intellectual capacity to analyse a situation and come to a judgement, might be seen as linked with the personal attribute of moral and ethical courage. This interwoven quality goes beyond a simple list of behaviours, skills and attributes.

All four segments are connected by three quintessential factors that affect and influence the behaviours, skills and attributes. These are the professional and technical expertise which a leader possesses, the training they have received (including simulations and exercises), and the range of real incidents they have attended.

Possession of the skills and attributes do not of themselves affect leader effectiveness; it is how they are skilfully combined and focused at the right time in the right way that makes the difference. When these factors are integrated and timed well, the desired outcome is more likely to be achieved, whether that is by balancing available resources against the needs of a community in crisis; engaging a wide variety of stakeholders in a crisis, each of whom has a different agenda and set of success criteria; or co-ordinating a strategy to return a community to a new normality. The concept of fluid, flexible adaptable leadership is key to contributing to successful outcomes (Borodzicz, 2004).

It is argued that personal and organizational culture and values may influence the adoption and implementation of interwoven leadership. The designation of 'hard' vs. 'soft' skills might be seen to be gender specific, with the latter being seen by some as a more female skill set. The emergency services are predominantly male dominated and have traditionally been a more task-oriented culture, placing a higher value on hard skills than on soft skills. In informal discussion with interviewees, discomfort has been evinced by some about incorporating soft skills authentically, in the belief that they might be part of an adherence to a politically correct dogma. However, this was not a prevalent view with the more senior officers interviewed. Increasingly, the Police Service and the Fire and Rescue Service have recognized the need to enhance their emotional intelligence skills, especially as the role of emergency services has increasingly focused on interacting more proactively with the communities they serve.

For an interwoven method to be embedded effectively, it must be supported by the wider organizational culture in normality and incorporated into organizational training at many levels. This may raise challenges of ethos as well as practicality. As with all cultural shifts, these value changes take a long time to truly embed within an organization, and some Gold leaders may continue to be wedded to the 'hard skill' approaches that may have served them well in their careers.

Training people in an interwoven leadership approach can certainly be carried out through focused simula-

tions and exercises. However, certain aspects may be more easily trainable than others. Strategies for creating options may be taught – the credibility needed to persuade others of their effectiveness involves personal value sets, experience and confidence, *inter alia*. Stress-handling strategies may be highlighted, but may not prevent post-traumatic responses.

As one interviewee commented about multi-agency strategic leadership, 'One of the things that make people good commanders is you've got to like it. You've got to like that adrenalin ... that buzz ... I love taking decisions that other people won't take'. He also observed, 'People who really don't want to do this shouldn't be made to. And there are some people who really want to do this and they should be stopped'. The implication of these comments is that some people have what it takes and some have not, and where people sit on the spectrum will be influenced by their personality as well as the more trainable aspects.

One way of addressing this conundrum might be to filter potential Gold leaders via their personal attributes in the TIPS model, and then identify skills gaps that need to be trained in the other quadrants. It is clear that rank, experience and training alone will not guarantee effective strategic leadership.

5. Conclusion

In carrying out this research, it has become increasingly apparent that the web of complexity pertaining to the unfolding events and pressures of any major incident is mirrored by an equal complexity of successful outcome criteria. In turn, this complexity is inexorably linked to the personal values, experience, drivers and expertise of the people responding to the incident. As human beings, carrying with us a multi-faceted mix of values, belief systems, experience, competence, knowledge and expertise, there is an infinite kaleidoscope of personal variables that can affect effective leadership of a strategic multi-agency major incident team.

However, the requirement for improved understanding, both practically and theoretically, of strategic command leadership of crisis events is of more significance than ever before. The nature of modern social structures and systems means that the nature of threats and the contexts in which they occur, geographically, socially and politically, pose problems of complexity. How we prepare strategic commanders and their teams requires an understanding not simply of the tasks they must perform, but of the importance of interweaving task skills, interpersonal skills and personal qualities with awareness of the multidimensional requirements of stakeholders in any response. The findings from this ongoing research suggest that this approach of interwoven skills and attributes should be

a key requirement built into the training and assessment of leaders of strategic multi-agency crisis response and their teams.

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